

Distribution of the zeros of certain self-reciprocal polynomials.

Koji Chinen (Kinki Univ.)

We give a simple sufficient condition for all the zeros of a self-reciprocal polynomial to lie on the unit circle. It is a self-reciprocal analogue of the famous "Eneström-Keakeya theorem". As an application, we can prove the Riemann hypothesis for a certain sequence of invariant homogeneous polynomials which originate in the theory of error-correcting codes.